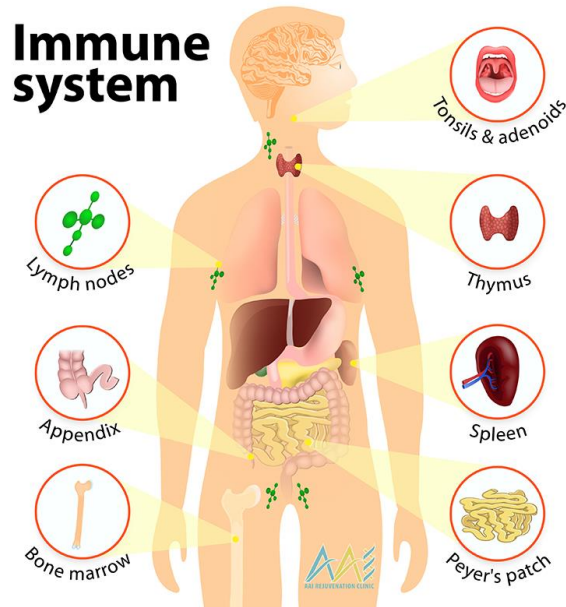


U5:L2 The Immune System Pt.2



The immune system is the body's defense against _____

_____.

Through a series of steps called the _____, the immune system attacks organisms and substances that invade body systems and cause disease.

What is the difference between innate (natural) and acquired (adaptive) immunity?

ACQUIRED / ADAPTIVE IMMUNITY

You develop an immune system once you're born in response to difference exposures

- 2nd & 3rd line of defence
- Activated when something gets past your _____
- Takes _____ days to be activated & lasts for _____
- Enhanced by _____

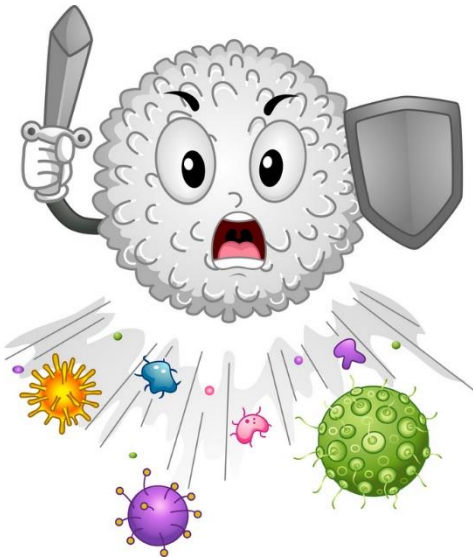
4 MAIN CHARACTERISTICS:

3rd Line of Defence:

- If the invader makes it past the first two lines of defense, the immune system identifies the invader (pathogen) and prepares a _____

- This response is known as the immune response and is _____

This means that the response targets specific pathogens.

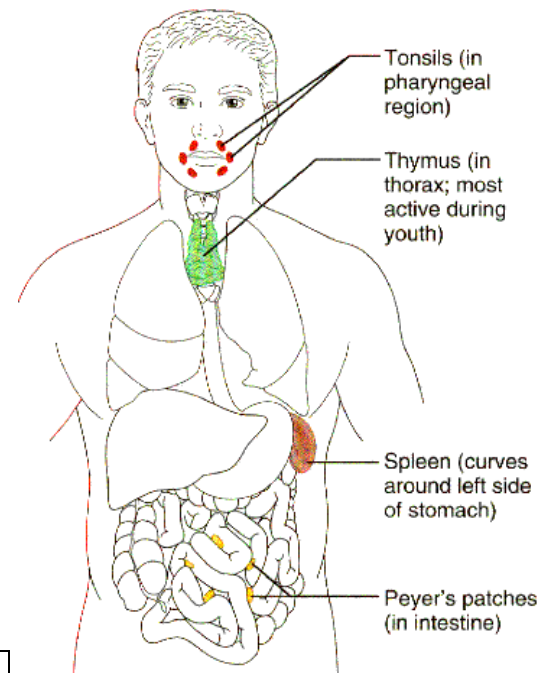


The immune system is made up of a network of _____ that work together to protect the body.

One of the important cells involved are _____, also called leukocytes, which come in two basic types that combine to seek out and destroy disease-causing organisms or substances.

Leukocytes are produced or stored in many locations in the body, including the _____. For this reason, they're called the _____. There are also clumps of lymphoid tissue throughout the body, primarily as _____, that house the leukocytes.

The two basic types of leukocytes are:

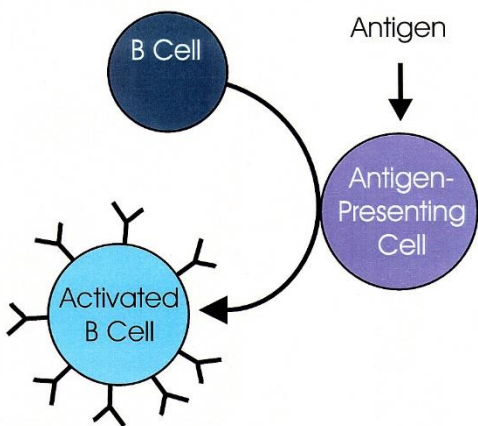


Several different cells are considered phagocytes. The most common type is the _____ which primarily _____.

The two kinds of lymphocytes are ___ **lymphocytes** and _____ **lymphocytes**. Lymphocytes start out in the _____ and either stay there and mature into _____, or they leave for the thymus gland, where they mature into _____.

B lymphocytes and T lymphocytes have separate functions:

- B lymphocytes are like the body's _____, seeking out their targets and sending defenses to _____.
- T cells are like the _____, destroying the invaders that the intelligence system has identified

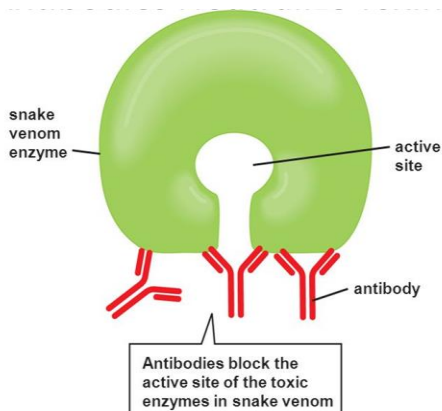


B Cells – _____
_____.

○ This is called an _____

○ The antibody and antigen fit together like a lock and key. This means that _____

Once produced, these antibodies stay in a person's body, so that if his or her immune system encounters that antigen again, the antibodies are already there to do their job. So if someone gets sick with a certain disease, like chickenpox, that person usually won't get sick from it again.



Antibodies also

_____ (poisonous or damaging substances) produced by different organisms.

Although antibodies can recognize an antigen and lock onto it, _____



Killer T-Cell

_____.

That's the job of the T cells, which are part of the system that _____

_____ that have been infected or somehow changed.

(Some T cells are actually called "_____")

T cells also are involved in _____

_____.

T Cells – _____

- This is called a _____
- When the T cell binds to antigens on the infected cell, it causes it to _____.